

Patent Claims

1. Device for dosing small-particled pharmaceutical preparations, which comprises a chamber (16) for accommodating a larger amount of the preparation and a dosing element with a dosing chamber (52) for accommodating a defined partial amount of the preparation, the dosing chamber being movable between a filling position, in which it is to be filled with preparation from the chamber (16), and a dispensing position in which the preparation from the dosing chamber (52) is to be discharged from the dosing device, characterised in that the volume of the dosing chamber (52) is adjustable in order to set the defined partial quantity of preparation to be dispensed from the dosing device.
2. Dosing device according to claim 1, characterised in that the volume of the dosing chamber (52) can be adjusted smoothly or stepwise.
3. Dosing device according to claim 1 or 2, characterised in that movably mounted on the dosing element is a pusher (32), the head (50) of which is movable back and forth in the dosing chamber (52) in order to vary the volume thereof.
4. Dosing device according to claim 3, characterised in that a threaded spindle (38) by means of which the position of the pusher (32) can be varied is provided on the dosing element.
5. Dosing device according to claim 4, characterised in that the pusher can be latched in various positions on the dosing element by means of a latching device.

6. Dosing device according to claim 1 or 2, characterised in that volume inserts with different external dimensions are releasably fixable in the dosing chamber in order to vary the volume.

7. Dosing device according to at least one of the preceding claims, characterised in that the dosing element is a dosing slide (22) which is movable in the channel (20) between its filling position and its dispensing position.

8. Dosing device according to at least one of the preceding claims, characterised in that the dosing slide (22) is preferably biased into its filling position by a compression spring and is movable into its dispensing position counter to the biasing force.

9. Dosing device according to one of claims 1 to 7, characterised in that the dosing element is a rotary slide which is rotatable in a receptacle between its filling position and its dispensing position.

10. Dosing device according to claim 8 or 9, characterised in that the dosing chamber (52) provided on the dosing slide (22) or rotary slide is in the form of a through-opening, one open end of which is aligned with an outlet opening (18) of the chamber (16) in the filling position while the other open end thereof is aligned with a dispensing opening (28) in the dispensing position, the open ends being sealed off by the base (12) and the plate (24) in the intermediate positions of the slide.

11. Dosing device according to at least one of the preceding claims, characterised in that a storage container containing the pharmaceutical preparation is releasably fixable to the dosing device, said storage container filling the chamber (16) with the preparation.

12. Dosing device according to at least one of the preceding claims, characterised in that at least one further chamber is provided for accommodating an additional small-particled pharmaceutical preparation, from which a partial quantity of the additional preparation is to be dispensed through the dispensing opening.

13. Dosing device according to claim 12, characterised in that a further dosing chamber is provided on the dosing element, which is connected with a chamber opening of the further chamber in the filling position for filling with the additional preparation and is connected to the dispensing opening in the dispensing position or an intermediate position of the dosing element in order to dispense the additional preparation.

14. Dosing device according to at least one of the preceding claims, characterised in that the dosing device is made from a plastics material and is preferably constructed as an injection moulded part, the plastics material optionally being suitable for autoclaving.

15. Use of a dosing device for dosing small-particled pharmaceutical preparations, characterised in that

- the dosing device comprises a chamber (16) for accommodating a larger amount of the preparation and a dosing element with a dosing chamber (52) for accommodating a defined partial quantity of the preparation,
- the dosing chamber is movable between a filling position in which it is to be filled with preparation from the chamber (16) and a dispensing position in which the preparation from the dosing chamber (52) is to be dispensed from the dosing device, and in that
- the volume of the dosing chamber (52) is variable in order to preset the defined partial quantity of preparation to be dispensed from the dosing device.

16. Use according to claim 15 for self-dosing by a user immediately before taking the preparation.

17. Method of dosing, particularly self-dosing, small-particled pharmaceutical preparations, particularly preparations in the form of pellets, granules or extruded materials, by the user immediately before taking the preparation, wherein

 a larger quantity of the preparation is stored in a chamber (16),

 a defined partial quantity of the preparation is transferred from the chamber (16) into a dosing chamber (52) of a given volume, the volume of the dosing chamber (52) determining the partial quantity to be transferred, and

 the partial quantity of the preparation contained in the dosing chamber (52) is dispensed ready for taking,

characterised in that the volume of the dosing chamber (52) before being filled with the preparation is adjusted in order to preset the partial amount to be dispensed.

18. Method of dosing, particularly self-dosing, and adjusting the mixing ratio between two small-particled pharmaceutical preparations to be taken together, particularly preparations in the form of pellets, granules or extruded materials, by the user immediately before the preparations are taken, wherein

in each case a larger quantity of each of the two preparations is placed in readiness in a separate chamber,

from each chamber a defined partial quantity of the particular preparation is dispensed into a dosing chamber assigned to the preparation, the volume of the particular dosing chamber defining the partial quantity of the preparation which is to be dispensed, and

the two partial quantities of the two preparations are dispensed ready for taking,

characterised in that

the volume of at least one of the dosing chambers is adjusted before the dispensing of the preparations in order to measure out the amount and adjust the mixing ratio.